BRUHATH BENGALURU MAHANAGARA PALIKE

# WORK SLIP

Name of Work: Restoration and Improvements of Roads at Hesaraghatta Main road, G Ramaiah layout, Sai Archade layout, Vijaya bank layout, Adityanagara Phase-02, and Surrounding areas in ward no-03 of Yelahanka New town Sub-division

**BRUHAT BANGALORE MAHANAGARA PALIKE**

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**Sanctioned Estimate Amount: Rs 115000000.00**
**Sanctioned Tender Amount: Rs 101628317.00**
**Tender Premium: 1.00 % Above**
**Name of the Contractor: Sri. K Venkataraju Contractor Bangalore**

**Work Slip**

| Sl. No. | Description of Item | Unit | Sanctioned Schedule-B | | | Executed | Upto 125% | | | Above 125% | | | Total Amount as per actuals | Excess | Savings |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Qty | Rate | Amount | Qty | Qty | Rate | Amount | Qty | Rate | Amount | | | |
| 1 | KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1 Earthwork excavation by manual means in hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH Chapter 3 (Page No.143 & Item No-19.2) | Cum | 6153.40 | 191.64 | 1179221.58 | 0.00 | 5888.05 | 191.64 | 1128370.09 | 0.00 | 191.64 | 0.00 | 1128370.09 | | 50851.48 |
| 2 | KSRRB M200-24 Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202 (P.No.140 I.No.18.47) | Cum | 760.19 | 962.47 | 731659.61 | 0.00 | 203.29 | 962.47 | 195662.33 | 0.00 | 962.47 | 0.00 | 195662.33 | | 535997.28 |
| 3 | KSRRB M300-14 Excavation for roadwork in all types of soil by mechanical meanse including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location and complete as per specifications. MORTH Specification No.301 (Page No.143 & Item No.19.14 SR2018-19) | Cum | 12233.70 | 43.89 | 536993.37 | 0.00 | 13241.74 | 43.89 | 581240.97 | 0.00 | 43.89 | 0.00 | 581240.97 | 44247.60 | |
| 4 | KSRB 4-1.3 . Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications.Specification No. KBS 4.1, 4.2 (Page No.13 & Item No.4.3) | Cum | 923.58 | 5462.20 | 5044779.78 | 0.00 | 924.69 | 5462.20 | 5050834.91 | 0.00 | 5462.20 | 0.00 | 5050834.91 | 6055.12 | |

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| 5 | Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc , complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200 including cost of materials, labour, HOM complete as per specifications. -do- Wall & bottom thickness 15cm (Page No 271 & Item No-37.59.2) | Cum | 1824.41 | 7140.90 | 13027933.02 | 0.00 | 1696.30 | 7140.90 | 12113098.49 | 0.00 | 7140.90 | 0.00 | 12113098.49 | | 914834.52 |
| 6 | KSRB 4-6.4 Providing and removing centering, shuttering, strutting, propping etc , and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.21 (Page No.16 & Item No-4.31) | Sqm | 540.00 | 383.27 | 206968.39 | 0.00 | 646.56 | 383.27 | 247810.15 | 0.00 | 383.27 | 0.00 | 247810.15 | 40841.76 | |
| 7 | KSRB 4.2.2 Providing and laying in position reinforced cement concrete of Design Mix M20 with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plintha etc., including cost of all materials, labour, HOM curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (Page No.14 & Item No-4.11) | Cum | 165.38 | 6058.53 | 1001958.93 | 0.00 | 115.28 | 6058.53 | 698411.06 | 0.00 | 6058.53 | 0.00 | 698411.06 | | 303547.87 |
| 8 | KSRRB M2200-6 Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 TMT Bars Fe 500(Page No.229 & Item No.28.8.2) Current Rate w.e.f.01/02/2021 | Tonne | 122.69 | 80948.07 | 9931977.04 | 0.00 | 111.00 | 80948.07 | 8985241.64 | 0.00 | 80948.07 | 0.00 | 8985241.64 | | 946735.40 |
| 9 | Removing and resetting of footpath slab(Page No.270 & Item No.37.56) | Sqm | 722.82 | 210.91 | 152448.67 | 0.00 | 0.00 | 210.91 | 0.00 | 0.00 | 210.91 | 0.00 | 0.00 | | 152448.67 |
| 10 | KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1 Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH Chapter 3 (Page No.143 & Item No-19.1) | Cum | 1135.47 | 139.18 | 158032.44 | 0.00 | 0.00 | 139.18 | 0.00 | 0.00 | 139.18 | 0.00 | 0.00 | | 158032.44 |

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| 11 | KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No.136 & Item No 17.1) | Cum | 20282.76 | 78.25 | 1587125.97 | 0.00 | 19129.79 | 78.25 | 1496906.02 | 0.00 | 78.25 | 0.00 | 1496906.02 | | 90219.95 |
| 12 | Supply and fixing Precast reinforced concrete slab 10cm thick including cost of reinforcement as per design and drawing, material cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveynce charges, labour charges inclusive of cost of all materials | Sqm | 4479.66 | 1941.22 | 8696005.59 | 0.00 | 4715.37 | 1941.22 | 9153570.55 | 0.00 | 1941.22 | 0.00 | 9153570.55 | 457564.97 | |
| 13 | Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc. complete - do - 10 cms thick (Page No.27 & Item No-5.31.2) | Sqm | 1042.47 | 976.39 | 1017857.28 | 0.00 | 40.50 | 976.39 | 39543.80 | 0.00 | 976.39 | 0.00 | 39543.80 | | 978313.49 |
| 14 | KSRB 5-8.1 Providing one line dressing to granite stone slab / granite stone masonry as per specifications. KBS 5.1.13(Page No 26 & Item No- 5.17) | Sqm | 1042.47 | 960.33 | 1001115.22 | 0.00 | 40.50 | 960.33 | 38893.37 | 0.00 | 960.33 | 0.00 | 38893.37 | | 962221.85 |
| 15 | Supply and fixing Precast reinforced concrete slab 23cm thick including cost of reinforcement as per design and drawing, material cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveynce charges, labour charges inclusive of cost of all materials | Sqm | 337.50 | 4530.91 | 1529182.29 | 0.00 | 224.56 | 4530.91 | 1017470.32 | 0.00 | 4530.91 | 0.00 | 1017470.32 | | 511711.97 |
| 16 | KSRB 4-1.6 : Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2(P.No 13 / Item No.4.6) | Cum | 101.52 | 5804.79 | 589302.61 | 0.00 | 107.00 | 5804.79 | 621124.48 | 0.00 | 5804.79 | 0.00 | 621124.48 | 31821.88 | |
| 17 | Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete (Page No.27 & Item No. 5.30) | No,s | 11280.00 | 436.80 | 4927158.14 | 0.00 | 12722.44 | 436.80 | 5557224.80 | 0.00 | 436.80 | 0.00 | 5557224.80 | 630066.66 | |

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| 18 | KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 (I No-19.64,P No-147) | Sqm | 33899.40 | 6.42 | 217756.19 | 0.00 | 33104.36 | 6.42 | 212649.13 | 0.00 | 6.42 | 0.00 | 212649.13 | | 5107.05 |
| 19 | KSRRB M600-1 Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5, with OPC at 150 kg/cum and Coarse agrregate 0.86cum, Fine aggregate 0.58cum using Concrete batch Mix Plant at 75 Cum/hr canacity with | Cum | 1326.06 | 3923.75 | 5203126.60 | 0.00 | 275.12 | 3923.75 | 1079482.21 | 0.00 | 3923.75 | 0.00 | 1079482.21 | | 4123644.39 |
| 20 | Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008 mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing) & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a | Cum | 1326.06 | 5263.07 | 6979146.07 | 0.00 | 275.12 | 5263.07 | 1447949.39 | 0.00 | 5263.07 | 0.00 | 1447949.39 | | 5531196.68 |
| 21 | Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/ basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision (P No 153 It No 20.5) | Cum | 3866.85 | 2014.87 | 7791196.97 | 0.00 | 4833.56 | 2014.87 | 9738996.21 | 1386.09 | 2014.87 | 2792791.56 | 12531787.77 | 4740590.80 | |
| 22 | KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P No 155 I No 20.18) | Cum | 5011.80 | 2021.29 | 10130315.26 | 0.00 | 6264.75 | 2021.29 | 12662894.07 | 356.12 | 2021.29 | 719824.81 | 13382718.88 | 3252403.63 | |

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| 23 | KSRRB M500-6 Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6). Issue rate on 01/01/2021 | Sqm | 25059.00 | 34.26 | 858501.29 | 0.00 | 31323.75 | 34.26 | 1073126.62 | 1780.61 | 34.26 | 61002.10 | 1134128.72 | 275627.43 | |
| 24 | KSRRB M500-17 Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen(P.No.171 I No.21.17.6) Issue rate on 01/01/2021 | Cum | 1252.95 | 7365.73 | 9228888.90 | 0.00 | 1566.19 | 7365.73 | 11536111.12 | 89.03 | 7365.73 | 655772.61 | 12191883.73 | 2962994.83 | |
| 25 | KSRRB 500-7 Providing and applying tack coat using 80/100 grade bitumen[VG10] on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-158,I No-21.7)Issue rate on 01/01/2021 | Sqm | 25059.00 | 12.85 | 321937.98 | 0.00 | 31323.75 | 12.85 | 402422.48 | 1780.61 | 12.85 | 22875.79 | 425298.27 | 103360.28 | |
| 26 | KSRRB M500-19 Providing and laying bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 40 mm) with 5.4% VG-30 Bitumen (P.No.162, I No.21.22.6) Issue rate on 01/01/2021 | Cum | 1002.36 | 8534.82 | 8554965.38 | 0.00 | 1252.95 | 8534.82 | 10693706.73 | 39.02 | 8534.82 | 333032.22 | 11026738.94 | 2471773.56 | |
| 27 | KSRB 15-19.2 Providing and applying ready mix priming coat over concrete/masonry/asbestos cement sheet/plastered surfaces including preparing the surface after throughly cleaning of oil,grease,dirt and other foreign matter and sand papering including cost of materials, labour, complete as per specifications. (Page No.124 & Item No.15.80) | Sqm | 2030.40 | 39.61 | 80428.61 | 0.00 | 2140.04 | 39.61 | 84771.69 | 0.00 | 39.61 | 0.00 | 84771.69 | 4343.08 | |
| 28 | KSRB 800-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. (Page No.180 & Item No.24.1) | Sqm | 2030.40 | 85.65 | 173899.70 | 0.00 | 2140.04 | 85.65 | 183290.15 | 0.00 | 85.65 | 0.00 | 183290.15 | 9390.45 | |

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| 29 | KSRRB M800-13 Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface.- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (P.No.185 I.No.24.15) | Sqm | 969.25 | 459.29 | 445164.31 | 0.00 | 1211.56 | 459.29 | 556454.24 | 53.39 | 459.29 | 24521.35 | 580975.60 | 135811.28 | |
| 30 | KSRRB M800-35 Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 – DO III Dt 11.06.1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without | Nos | 896.00 | 360.79 | 323269.81 | 0.00 | 0.00 | 360.79 | 0.00 | 0.00 | 360.79 | 0.00 | 0.00 | | 323269.81 |
| | TOTAL | | | | 101628317.00 | | | | | | | | 101207077.46 | 15166893.33 | 15588132.87 |

350.61

Percentage of excess comparing to the sanctioned Estimated cost = $\frac{15166893.33}{101628317.00} \times 100 = 14.92\%$

Assistant Engineer
Ward No.83
BBMP-Bangalore

Assistant Engineer
Yelahanka New Town Sub Division
BBMP-Bangalore

Executive Engineer
Yelahanka Division
BBMP-Bangalore

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ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ